# The Nongroup Health Insurance Market: Short On Facts, Long On Opinions And Policy Disputes

A roadmap through the areas of agreement and disagreement in a critical debate on how to solve the problem of too many uninsured Americans.

#### by Mark V. Pauly and Len M. Nichols

ABSTRACT: Individual health insurance is more administratively costly and more prone to adverse selection (especially in the presence of community rating) than group health coverage is. In this paper we show that the individual market has been shrinking over time but that it might be stimulated if tax credits for such insurance were made available. The primary areas of factual disagreement have to do with the frequency with which individual insurers charge some applicants higher premiums than others (based on health risk), and the effect that premiums related to risk have on the likelihood of insurance purchase at different income levels. The primary area of policy disagreement concerns the value of offering insurance at lower premiums to higher risks relative to the value of making voluntary insurance attractive to lower risks. We argue that a major market failure for individual coverage may be caused by insurers' inability to distinguish some truly low risks. We conclude that the individual market works acceptably well for about 80 percent of potential buyers, but its performance for the remaining 20 percent of low-income or high-risk persons is controversial.

AX-CREDIT PROPOSALS TO REDUCE THE NUMBER of uninsured Americans have rekindled interest in policy analyses of the nongroup or individual health insurance market. The use of some form of this market is practically unavoidable because most low-income uninsured persons have no access to group insurance.¹ But how effectively could some version of individual insurance function as an avenue for coverage expansion? In this paper we discuss areas of consensus (on both empirical facts and policy issues) about the actual and potential functioning of the individual insurance market; we also specify areas in which

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there is disagreement about facts and about policy objectives and implications.

Analysts agree that administrative loads—selling and risk-bearing costs that are added to expected medical claims costs when setting insurance premiums—are on average higher in nongroup than in group markets. There is also agreement that there is higher risk of adverse selection in the nongroup market and that the nongroup market is small and has been shrinking in recent years. Finally, there is agreement that all policy interventions in insurance markets produce short-term winners and losers and therefore must reflect trade-offs involving value judgments.

Factual disagreements about this market are true impediments to policy consensus. They include estimates of the number and proportion of persons who cannot avoid "tough" choices in the nongroup market; the importance of being able to tailor benefit packages to individual preferences; and the effects of high-risk pools and current market regulations on the performance of the nongroup market.

Four key policy questions remain unresolved: How well does the nongroup market work now? How would an infusion of people seeking coverage with subsidies change the way the market works? Would the group market be inappropriately affected by tax credits for nongroup insurance purchase? Are there other policy interventions that might enable the nongroup market to better absorb large numbers of new entrants?

This paper seeks to clarify these issues to the extent possible with current research and data. Our goal is to provide a roadmap to increase the precision of the debate over potential expansions of the nongroup market.

#### **Areas Of Factual Agreement**

- Administrative loads are higher in nongroup markets. Nongroup health insurance is similar to other consumer insurance (homeowners, auto, life) in terms of its administrative cost. In such insurance, selling and administrative expenses and return on risk capital typically consume 30–40 percent of the premium. The nongroup administrative "loading" percentage appears, from National Association of Insurance Commissioners (NAIC) data, to have fallen by about 10 percent in the 1990s, while the differential between group loadings and those in nongroup insurance narrowed slightly.² The largest share of nongroup cost goes toward selling expenses; compared with group insurance, sales agents and brokers must spent more time per customer, so commissions and salaries must be higher. In addition, underwriting expenses are higher than in group-health settings, in which there is less need to worry about risk variation.
- Adverse selection is likely in the nongroup market. The possibility of adverse selection can be large in the nongroup insurance market, and this necessitates industry practices that contradict some proposed social goals of insurance. Adverse selection is always a risk in voluntary insurance markets that feature individual choice, because those who expect to be sick are more likely to seek health insurance

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## "Insurers' fear of adverse selection may be more important than the actual extent of observed adverse selection."

than are those who expect to be healthy, all other things equal. The presence of adverse selection means that if insurers offered all prospective buyers a premium equal to the population average cost if every person were insured, they would probably lose money. All of the healthy are not likely to buy at this average price, because it exceeds their average or expected out-of-pocket costs. That is, because good risks would refrain from buying, the premium charged would be below the actual average cost of covering the benefits offered for the higher-risk population who would buy.

The effects of adverse selection in nongroup markets are most severe in states with community rating and guaranteed-issue rules for the individual market. These rules forbid insurers from using information they do have about risk levels in either setting premiums or accepting applications. Thus, they must set prices expecting a population of higher-than-average risks to seek insurance.

However, even in states without such rules, some potential new insurance purchasers may know more about their expected expenses than the insurer can determine from underwriting. (Underwriting is only an issue for new customers or those who wish to change coverage; virtually all insurers renew policies for continuing customers without seeking additional underwriting information, although premiums may rise over time.)<sup>3</sup> This is why nongroup insurers use preexisting-condition exclusions and refuse to sell to certain customers.

The evidence on whether adverse selection actually occurs to any appreciable extent in unregulated individual markets is mixed and may be difficult to observe precisely because insurers have learned to protect themselves. It does seem to occur when community rating is present. When insurers are permitted to underwrite, Mark Browne found evidence that low risks bought less nongroup coverage (differences in loading were adjusted for) than they obtained in a group setting, and high risks obtained more generous coverage. However, Allison Percy was unable to find evidence that community rating affects low risks differently from high risks. More generally, if adverse selection occurred to an appreciable extent in unregulated nongroup markets, we would expect to find that high risks in such markets would more frequently and more extensively purchase coverage than do low risks, a pattern that critics of nongroup insurance have usually not alleged. In any event, insurers' fear of adverse selection—and the underwriting and pricing decisions this fear engenders—may be more important than the actual extent of observed adverse selection. We return to this point later.

At this point, we conclude that when it comes to treatment of above-average risks, nongroup insurance plans face an unattractive trade-off: If they do not charge or collect above-average amounts for above-average risks, they face serious adverse selection, which restricts the amount of insurance they can profitably sell

and makes the problem worse, but if they do charge premiums needed to cover higher costs or otherwise restrict access for those on whom they fear losing money, they face social opprobrium.

- The nongroup market is small and shrinking. Despite population growth of 9.5 million since 1996–97, the number of nongroup candidates (persons under age sixty-five who lack access to employer coverage and are ineligible for public coverage) fell by 3.4 million, and the number of people actually enrolled in nongroup coverage fell by 1.1 million (Exhibit 1). Part of this is good news: The extent of coverage sponsored by an employer (or a union) grew during the late 1990s as the economy and labor markets strengthened, and public programs reduced the number of candidates for nongroup coverage. It appears that about half of the reduction in the population purchasing nongroup insurance went to greater use of employer coverage, and about a quarter each to Medicaid/State Children's Health Insurance Program (SCHIP) and the uninsured. The nongroup market appears to be on a gently declining trajectory absent some kind of policy intervention.
- Policy interventions in this market inevitably produce trade-offs. For reasons we have already mentioned and others we discuss below, the nongroup market is widely acknowledged to be less than perfect, yet few regulatory policies proposed or implemented can make some better off without making others worse off. Thus, policy choices in this market are difficult, and a clear analysis of who will gain and who will lose what and how much is an essential (but often unavailable) policy tool.

#### **Areas Of Factual Disagreement**

As noted above, several areas of factual disagreement exist in the debate over nongroup coverage: estimates of the number and proportion of persons who cannot avoid "tough" choices in the nongroup market; the importance of being able to tailor benefit packages to individual preferences; and the effects of high-risk pools and current market regulations on the performance of the nongroup market. The

EXHIBIT 1 Characteristics Of The U.S. Nonelderly Population (In Millions), By Coverage Status, Selected Years 1996–2001

	Nonelderly population	Offered employer coverage	Enrolled in employer coverage	Candidates for nongroup coverage	Enrolled in nongroup coverage
Population in 2000-01					
(millions)	239.1	179.9	161.6	33.7	8.6
Percent of population	100%	75.2%	67.6%	14.1%	3.6%
Percent change since					
1996-97	4.1%	6.1%	6.1%	-9.3%	-11.5%

**SOURCE:** Community Tracking Study (CTS) household survey, 1996–97 and 2000–01.

**NOTES:** The nonelderly population includes persons under age sixty-five. Nongroup candidates are those who do not have access to employer coverage through any adult family member and who are not personally eligible for Medicaid or other public insurance programs.

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most important point of disagreement is the first: numbers of persons with tough choices. Thus, we devote considerable space to a discussion of this issue, including the presentation of some new evidence, before returning to our discussion of the other points of disagreement.

#### Who Faces 'Tough' Choices?

By "tough" we mean premiums that are high relative to both income and average premiums, or policies with riders that exclude coverage of certain high-cost conditions. We know that both situations occur, but how frequently? This is the key unknown in this market, and opinions about it largely explain one's policy preferences regarding the nongroup market.

There are two fundamental issues. First, there is disagreement about the meaning or importance of some of the categories of persons alleged to face hard choices. Second, even when a category is reasonably clear (such as "medically uninsurable"), there is disagreement about how prevalent this is in practice. Are "most" or "many" uninsured people likely to be underwritten as nonstandard risks? How many is too many? And how much higher premiums should higher risks be expected to pay? To make tough choices less severe, either more costly subsidies or potentially distorting community rating will be needed; different people value the consequences of these policy choices quite differently.

■ Who is affected? Four types of people are potentially included. First, some people are truly uninsurable. This means that insurers are not willing to offer them premiums that would cover both their expected costs and their catastrophic risk, probably because the premium would be very high relative to income or even lifetime wealth. There is relatively little that unsubsidized voluntary insurance markets can do for such persons. Fortunately, the fraction of nonelderly uninsured persons who are not institutionalized and who would be rated as actuarially uninsurable is generally estimated to be very small, less than 1 percent of the population.<sup>7</sup>

Second, insurers sometimes exclude existing conditions or illnesses from coverage offered to the newly insured but still agree to cover any other care used. This strategy may decrease or increase the likelihood of coverage. Specific exclusions reduce incentives to purchase coverage, since the condition for which the person knows care will be needed is expressly not covered. However, if the person and insurer have similar expectations about required expenses for the care of that condition, and that amount is within the person's financial resources, then de facto self-insuring for that condition allows the person to avoid the loading fee insurers would charge. That person then purchases insurance for truly uncertain conditions on an actuarially sound basis. Cheaper insurance for uncertain events may be a better bargain for some than is expensive insurance that includes certain expenses that are "taxed" at the nongroup loading percentage.

It is unfortunately not possible now to produce nationally representative estimates of the size of the population that is offered nongroup insurance with these

condition-exclusion riders, nor is much known about the actuarial value of these riders, although some examples have been recently suggested as illustrative. We comment on these in some detail below.

The third category of people who face tough choices are those who face premiums higher than they are willing to pay, and higher than they should pay, according to some social judgment. This phenomenon is likely to be inversely correlated with income and risk but, again, is impossible to estimate precisely.

The fourth category is people who are willing to pay the premium but who are judged to be sacrificing too much purchasing power by so doing. About one-third of those in households with incomes below the federal poverty level (in 2002, \$8,860 for a single person, and \$18,100 for a family of four, in the contiguous states) do obtain insurance (individual and group). These could be described as "insured nonafforders."

There are some uninsured persons who do not face these kinds of choices. Some people with substantial incomes choose not to obtain insurance. Fully 40 percent of the uninsured (sixteen million persons) are in family health insurance units with incomes greater than twice the poverty level, and one-quarter of the uninsured are in households with incomes above 300 percent of poverty. The great majority of these uninsured higher-income persons are not high risk. There is considerable disagreement about where the line between "insured nonafforders" and "uninsured afforders" should be drawn, and whether the latter should be a matter of public concern or candidates for new subsidies.

■ **New evidence.** It is difficult to get reliable premium quotes that represent genuine offers to sell, linked to specific benefit package choices for a nationally representative sample of nongroup candidates. As an alternative way of measuring how the individual insurance market works, we can assemble data on the final outcome: Other things being equal, are higher-risk persons more or less likely to end up with such insurance than lower-risk persons are, and what do they pay? However, to answer even this question, one needs a measure of "risk" as perceived by the insurer or the potential purchaser at the point at which insurance might be purchased.

Chronic illness status. One problem is that data at best tell us what the risk level of an insured person or household is when they were surveyed, not when they applied for and were sold insurance. A person could appear to everyone (including the person) to be healthy at insurance purchase and then get sick later. Thus, using self-reported health status as a measure of risk can bias things in unknown ways. On the one hand, such "subsequent illnesses" can generate the appearance that insurers do not pay attention to risk; sick people seem to pay the same as well people. On the other hand, if obtaining insurance improves health, the causation could run from no insurance to "worse subsequent illness" status, not the other way around. Our judgment is that measures of chronic conditions (especially measures that date the onset of the condition) are less subject to this problem than are measures of contemporaneous health status. We provide some facts that shed

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some light on the key question of how many people face "tough" choices in the nongroup market, but unfortunately we cannot resolve the uncertainty entirely.

Exhibit 2 shows the proportion of the population that reports the presence of one or more chronic conditions, by insurance access and income.<sup>11</sup> This exhibit is constructed using a "family" concept of health status for total, employer, and nongroup coverage: A person is included in a family with chronic conditions if at least one family member reports the presence of a chronic condition.<sup>12</sup>

The proportion taking up insurance varies positively with income in both employer and nongroup coverage settings, is higher in the employer coverage setting (presumably because of the tax exclusion and reduced loading), but is either higher or the same in high-risk households as in low-risk households. One interpretation is that the greater need for or benefit from insurance overcomes higher premiums in the case of nongroup insurance and potential reluctance to hire in the case of employer coverage. These results are consistent with those of Mark Pauly and Bradley Herring, who used late 1980s data in a full multivariate setting with "risk" measured by expected expenses. Pauly and Herring found that high risks were as likely as low risks were to be insured in large-group, small-group, and nongroup settings, except for low-income persons working at small firms.<sup>13</sup>

Self-reported health status. The results are rather different if we use contemporaneous self-reported health status, as shown in Exhibit 3. In this case, in both group and nongroup settings, persons in families with at least one member in fair or poor health are less likely to be insured. Either sicker people cannot or do not obtain health insurance (in either setting), or not having health insurance increases the likelihood of having poor health status.<sup>14</sup>

EXHIBIT 2
Health Insurance Take-Up Rates Among The Nonelderly Population, By Type Of Insurance, Chronic Illness Status, And Income, 2000–2001

	Employer coverage take-up rate		Nongroup coverage take-up rate	
	Persons with at least one family member having at least one chronic condition	Persons with no family member having at least one chronic condition	Persons with at least one family member having at least one chronic condition	Persons with no family member having at least one chronic condition
All persons	89.8%	88.1%	30.8%	22.6%
Below poverty 100–199 percent of poverty	71.0 83.2	57.5 75.7	6.1 11.1	5.9 10.9
200-399 percent of poverty 400 percent of	92.7	90.3	35.7	23.8
poverty or more	95.8	95.0	59.8	42.9

**SOURCE:** Community Tracking Study (CTS) household survey, 2000–01.

**NOTES:** The nonelderly population includes those under age sixty-five. The nongroup take-up rate is computed with nongroup candidates (those who do not have access to employer or public coverage, as explained in Exhibit 1) as the denominator.

EXHIBIT 3
Health Insurance Take-Up Rates Among The Nonelderly Population, By Type Of Insurance, Self-Reported Health Status, And Income, 2000–2001

	Employer coverage take-up rate		Nongroup coverage take-up rate	
	Persons in families with at least one member who reports fair or poor health status	Persons in families in which all members report being in good, very good, or excellent health	Persons in families with at least one member who reports fair or poor health status	Persons in families in which all members report being in good, very good, or excellent health
All persons	82.6%	91.4%	11.3%	30.0%
Below poverty 100-199 percent	53.4	67.5	1.2	9.3
of poverty	74.6	74.6	5.7	13.4
200–399 percent of poverty 400 percent of	86.6	92.5	20.1	29.9
poverty or more	92.8	95.7	33.2	50.7

SOURCE: Community Tracking Study (CTS) household survey, 2000-01.

**NOTES:** The nonelderly population includes those under age sixty-five. The nongroup take-up rate is computed with nongroup candidates (those who do not have access to employer or public coverage, as explained in Exhibit 1) as the denominator.

Age. Another, less subjective way to measure risk is by age. Other things equal, we know that (even controlling for health status) insurers expect older persons to have higher health risks and costs than younger people have. Exhibit 4 illustrates the effect of age on insurance purchasing for all nongroup coverage candidates, controlling for income relative to the poverty level. Despite the fact that offered premiums for nongroup insurance are known to rise with age, older persons at a given income level are in general much more likely to be insured than younger adults are.<sup>15</sup> The oldest category (ages 45–64) are three times as likely to be covered as are the youngest adults (ages 19–24) for all income categories above 200 percent of poverty. We also note that families with means who are nongroup can-

EXHIBIT 4
Proportion Of Nongroup Candidates Who Are Insured In The Nongroup Market, By Age And Income Level, 2000–2001

	Income as percent of poverty				
Age	Less than 200%	200%-400%	More than 400%		
0-18	_a	32.3%	58.7%		
19-24	8.1%	12.2	19.1		
25-44	7.7	25.5	44.5		
45-64	10.8	38.0	64.5		

**SOURCE:** Community Tracking Study (CTS) household survey, 2000–01.

NOTE: For explanation of nongroup insurance candidates, see Exhibit 1.

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<sup>&</sup>lt;sup>a</sup> Cell size is too small to produce reliable estimates. The vast majority of children under 200 percent of poverty are now eligible for Medicaid or the State Children's Health Insurance Program (SCHIP).

## "The nongroup market works well for the 40 percent of nongroup candidates at all risk levels who are not income constrained."

didates tend to cover their children as well, which suggests that family policies are indeed available. However, the income gradient for children suggests that family policies are not perceived to be affordable by a majority of nongroup candidate families with incomes below 400 percent of poverty.

Multivariate analysis. Finally, to refine judgment about the conflicting effects of different types of health status, we did a multivariate analysis of the probability of having nongroup coverage, conditional on being a nongroup coverage candidate. This model controls for age, gender, race, income, education, martial status, parental status, and work status and includes three health status measures: being in a family insurance unit with at least one member who reports fair or poor health status; being in a family insurance unit with at least one member who reports at least one chronic condition; and the interaction or product of the two.<sup>16</sup>

We found that the conclusions we drew from Exhibits 2 and 3 hold up in a multivariate context: Being in a household with a member in fair or poor health status reduces the probability of coverage, having a family member with a chronic condition increases the probability of coverage, and the combination or intersection of the two measures of health risk is insignificant, controlling for all other obvious influences. To Our interpretation of these results is that persons in families with chronic conditions—surely the easier of our two health status indicators for insurers to detect—have a willingness to pay for the insurance they are offered that exceeds any extra premium they are asked to pay by those insurers. However, persons who report generalized fair or poor health in their family are apparently less likely to be willing to pay the price they are asked to pay, whatever health status they had at the time they sought insurance (if they sought it at all). The surface of the surfac

Defining and measuring risk. To sum up: It is easy to see why analysts differ on the acceptability of how the nongroup market treats those facing tough choices; the answer depends on how one defines and measures risk.

This is not meant to imply that we believe that no unhealthy persons are subjected to outright rejection, extremely high prices, or restrictive riders. This sort of possibility is exactly what Karen Pollitz and colleagues uncovered in their experiment of soliciting concrete offers for seven hypothetical individuals or families in eight different nongroup health insurance markets. In addition, the steep income gradient for all take-up rates in our data and in the multivariate analysis implies that persons in the nongroup market often face income constraints, regardless of their health status. Low income matters. Still, in our view, overall these data clearly suggest that about a quarter of those with chronic conditions, and almost 30 percent of those in households with a member with at least one chronic condition, are now able to secure coverage in the nongroup market.

Our results therefore imply that the nongroup market works passably well for the roughly 40 percent of nongroup candidates at all risk levels who are not income constrained (in family insurance units with incomes at least as great as 200 percent of poverty—in 2002, \$36,200 for a family of four). Since about 70 percent of adults at all income levels do not have any kind of chronic condition, one could further use the data to argue that the nongroup market produces actuarially "acceptable" offers for roughly 80 percent of nongroup candidates, in that they appear to have access to insurance products that some of their similar peers buy.<sup>19</sup>

Even if we focus on the fair–poor method of measuring health status, we find that only 11 percent of the entire nonelderly population has self-reported status that low. Use of either measure of health status leads us to the conclusion that the major policy question is this: How can the nongroup market's performance for the unlucky 20 percent be improved without reducing its solid performance for the roughly average-risk 80 percent?

Expected expenses. Finally, we address the related and relevant question, What is the expected expense level of those who remain uninsured instead of purchasing coverage in the nongroup market? Exhibit 5 suggests the nature of what might be a key market failure in voluntary nongroup insurance markets.

The data here are total expenses incurred (not amounts paid; on average, the uninsured pay about 40 percent of their total expense). Among the uninsured, persons who report fair or poor health status generate medical expenses 2.9 times those associated with people in good, very good, or excellent health. However, we note that while privately insured persons in fair/poor health spend 4.9 times the amount generated by the healthy insured, uninsured persons in fair or poor health cost only about 25 percent of the amount that insured persons at the same health status cost. These spending levels are much farther apart than normal moral-hazard effects could account for. Furthermore, we might expect the moral-hazard effect to be smaller for those in fair or poor health; presumably their use of medical services is less discretionary than is that of persons in better health.

We interpret these data to suggest that some of the sickest persons who report fair/poor health may have managed to get private coverage either through a group

EXHIBIT 5 Average Total Medical Expenses Incurred (Not Paid) By Nonelderly Americans, By Health And Insurance Status, 1997

	Fair or poor health (A)	Good health or better (B)	Ratio of A to B
Uninsured (C)	\$1,641	\$ 565	2.9
Privately insured (D)	6,222	1,282	4.9
All nonelderly	5,148	1,163	4.4
Ratio of C to D	3.8	2.3	

SOURCE: Medical Expenditure Panel Survey, 1997.

NOTE: Good health or better means that the person reported good, very good, or excellent health status.

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or in the nongroup market.<sup>21</sup> More strikingly, the data also suggest that many of the uninsured, at all levels of health status, have much lower expected costs than insurers could reasonably expect from observing costs for similar persons with insurance. Based on their own experiences, insurers would therefore anticipate much higher expenses among the insured than are expected among the currently uninsured.<sup>22</sup> This interpretation is corroborated by the fact that the seventy-fifth-percentile expense for the uninsured with fair or poor health is only \$1,149 per year, yet we observe relatively few comprehensive guaranteed-issue nongroup policies with annual premiums anywhere near that cheap.

The problem may be that many uninsured persons are unable to reveal their relative health status, taste for less medical care, and low expected costs. Consequently, their lower expected expenses and benefits (which imply a lower willingness to pay for insurance) are not matched by an offer of inexpensive insurance. Thus, profitable and mutually beneficial transactions are not occurring; in this sense there is "market failure." Perhaps the technical barrier is the expected cost of good information on health risk, or perhaps the problem is that the uninsured have low but unobservable tastes for aggressive medical care, given their health status. Whether policy can reduce the welfare loss from this market failure is unclear, but policies that would reduce loads generally or improve information matches between candidates and sellers, or both, would appear to be worthwhile public and private investments. To conclude: Perhaps many people are not buying nongroup policies because they are unable to signal that they have relatively low expected expenses. Insurers think that the remaining uninsured are more likely to be more expensive than they are.

Premiums in the nongroup market. What about the premiums charged in the nongroup market? One striking impression left by studies of premium levels and insurance offers is that the range of offers obtained from different firms—in terms of both price and benefit-exclusion riders—by a person with a given set of risk-related characteristics is quite large, even within a given geographic area in which offers are made by many competitors.<sup>23</sup> This could be another manifestation of costly information as the main impediment to mutually beneficial transactions; over the range of observed offers, expected search costs for candidates, even relatively healthy candidates, to find a "good" offer may be high (although the search can be improved through the use of agents or brokers). If an average-risk person, with fairly low risk aversion and motivation in the first place, samples twice and gets two bad draws from a distribution like that discovered by Pollitz and colleagues, that person might rationally stop looking. But a person at higher risk, with a strong reluctance to use charity care, might persist.

One key empirical conundrum that remains is this: How representative is the distribution that Pollitz and colleagues discovered? To answer this question, we present data from one large insurer in the nongroup market from one state, which agreed to supply data to us through a mutually trusted third party to preserve

"The most important nongroup market failure may be the inability of relatively low risks to obtain offers at reasonable premiums."

confidentiality. This state requires neither guaranteed-issue nor premium-variance restrictions (rate bands or modified community rating). The data are drawn from the carrier's underwriting file, not its enrollment file, so they represent offers to applicants.

Premiums are varied by this insurer for health status according to the following schedule: Level 2:Level 1, 1.25; Level 3:Level 1, 1.77; Level 4:Level 1, not revealed. Level 1 is the best health risk class and lowest premium level, and Level 4 is the worst risk class and highest premium level.<sup>24</sup> The insurer reported that its distribution of offers to prospective buyers of nongroup insurance looked like this: 57 percent of its offers went to Level 1 risks; 21 percent to Level 2; 6 percent to Level 3; and 3 percent to Level 4; 14 percent of applications were rejected.

Given these health status premium multipliers and given an applicant's age, this insurer offered premiums no more than 25 percent higher than its lowest premium to 78 percent of all applicants. Probably some of the remaining 22 percent of applicants would either pay the higher Level 3 or 4 premiums or find insurance at another firm. Hence, these data are consistent with our conjecture that about 80 percent of candidates for nongroup coverage could and would obtain that coverage at moderate premiums, relative to their expected benefits and ability to pay.

This particular company uses rating differentials and rejection instead of exclusion riders; no policies are sold by this insurer with limits on coverage for specific conditions (only a few states actually prohibit exclusion riders, although the state in question does not). <sup>25</sup> Its rejection rate is higher than is believed to hold for the population as a whole but is, nevertheless, considerably lower than the hypothetical rejection rate observed by Pollitz and colleagues (37 percent). <sup>26</sup> In addition, the percentage of "clean" offers—no riders and the lowest rate for an age category—was more than five times greater than the clean offer rate in Pollitz and colleagues' study (10 percent).

These data cannot be said to be representative of nongroup insurers as a whole, since they come from one company in one state. But the data are useful because they reflect the experience of the entire distribution of individuals (and health risks) actually seeking insurance from a large insurer in the nongroup market, not a predetermined set of people with preexisting chronic or latent but potentially serious conditions.<sup>27</sup> As such, they give us yet more confidence in our conclusion that the nongroup market works tolerably well for the great majority, except for those who are income-constrained. The other 20 percent who may or may not be income-constrained may well face premiums outside some socially acceptable range, more restrictive riders, or still higher outright rejection rates, of the sort observed by Pollitz and colleagues.<sup>28</sup>

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Our larger point is that the most important market failure (failure to behave like an efficient market, not failure to achieve postulated social goals) in the nongroup market may be the inability of the much more numerous relatively low risks to obtain offers at premiums that are reasonable relative to the benefits they would expect to collect. The numerically fewer cases of a kind of social failure—that is, high prices charged to or restrictive riders offered to the very sick—appropriately are of concern but may not be the main story line.

#### **Importance Of Tailored Benefits**

We now return to our discussion of the areas of factual disagreement. There is disagreement on the importance and feasibility of offering benefit packages that are tailored to fit individual preferences. Different political groups place different values on the merits of creating a system in which individuals have insurance they can choose themselves, and analysts differ on how much choice is effectively available in the nongroup market, especially to the minority at high risk. In the group setting, a number of studies have shown that satisfaction with a given insurance policy tends to be greater when it is one of a variety of plans among which group members can choose, compared with the situation (especially common in small firms) in which all people in a group must take the same plan.<sup>29</sup> By extension, the even wider range of choice that is often available in nongroup settings—choice about type of plan and level of cost sharing—should be even more valuable. Of course, not everyone wants variety, and the true extent and value of variety for all nongroup coverage candidates is unknown. There is some evidence that large groups offer more variety when workers in the group have more widely varying preferences, but how much that improves net satisfaction is unknown.<sup>30</sup> For some nongroup coverage candidates, having access to more variety is a benefit that could compensate for having to pay higher loads in the nongroup market.

### **Effect Of High-Risk Pools**

How do high-risk pools affect the functioning of the nongroup insurance market? According to data compiled each year by Communicating for Agriculture, the average subsidy to state high-risk pools is 50 percent (in other words, aggregate premiums collected equal half of claims plus administrative costs). Only two states (Minnesota and California) have more than 2,000 risk-pool enrollees. Twenty-one states do not have a high-risk pool, and one state uses it for Health Insurance Portability and Accountability Act (HIPAA) eligibles only. Only a few use general revenues to subsidize enrollees; most use market share–based assessments on the insurance industry, which is like an excise tax on insurance. Given the small number of people involved, however, the implicit tax rate is now very small. In addition, some states allow these assessments to be at least partially credited against premium or income taxes, giving the funding mechanism a broader base. Enrollment is kept down by preexisting-condition restrictions and

above-average premiums, along with limits on capacity in a few states. As a practical matter, one must be rejected by at least one insurer to be eligible for a pool, and the typical enrollee leaves the pool after less than three years. Many use it as a bridge policy to cover themselves before they become eligible for Medicare or group insurance through a spouse.

There is some evidence that the presence of a high-risk pool increases the likelihood of private coverage in a state.<sup>32</sup> The mechanism might be that the presence of a high-risk pool serves as a safety valve for the highest risks, so insurers are less worried about extreme adverse selection in those states and offer lower premiums on average, which induces more purchases than would otherwise occur. This affects only a few people, however, so this result remains controversial.

#### **Effects Of Current Market Reforms And Regulations**

One's preference for "reform" is proportional to one's dissatisfaction with the status quo; this in turn is sometimes driven by one's appraisal of the effects of techniques that insurers use to protect themselves from adverse selection. Selection and protection are inevitable behavior on the part of insurers, necessary for survival in any system that allows individual choice about the amount and type of health insurance and that makes any purchase voluntary. The only certain way to avoid problems is to make purchase of a single predetermined policy mandatory. We assume here that such a strategy is inconsistent with current social goals as reflected in the U.S. political environment.

What then do we want a voluntary market-based system to do, and what trade-offs are we willing to make? It is not possible to have everyone pay the same premiums and yet have strong incentives for voluntary purchase for the large proportion of the uninsured who are neither at high risk nor poor. Some compromises will be needed; which ones will we be willing to make?

To our knowledge, there has not been a serious national policy debate about this question. Many policy discussions either assume that premium averaging with minimal coverage loss is feasible—and debate the details of regulation—or assume that any risk rating is a fatal flaw of attempts to use subsidized voluntary purchase as a vehicle for reducing the number of uninsured persons. There is usually little or no discussion of which kinds of departures from premium averaging are most crucial in terms of some broader definition of social goals.<sup>33</sup>

In any event, the evidence on the coverage effects of insurance reforms in the nongroup market is reasonably clear: Requirements regarding guaranteed issue and restrictions on allowed premium variance in any form have uniformly reduced coverage in states that have tried it.<sup>34</sup> The evidence on affecting the insured risk pool itself is more ambiguous.<sup>35</sup> Some policy analysts and advocates are clearly willing to disadvantage the healthy many, to help the sick few. This is a policy trade-off that is ultimately subject to value judgments; thus, the facts are not in dispute here so much as the interpretation of them.

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#### **Policy Disagreements And Implications**

■ How well does the nongroup insurance market work now? There is considerable disagreement among policymakers and policy analysts about how the nongroup insurance market works now. To some it appears that nongroup insurers always sell expensive policies with woefully incomplete coverage only to the small minority of the uninsured who are in perfect health. To others it appears that premiums are moderate and often below some group premiums, coverage is adequate, and the bulk of the uninsured have good enough health and income levels that they can find reasonable coverage at reasonable premiums. Indeed, sometimes these disparate views are based on the same data collected in a single study, as in the case of Pollitz and colleagues and their National Association of Health Underwriters (NAHU) collaborators.<sup>36</sup>

Why is there so little agreement? Most obviously, data are incomplete. Different studies look at different small numbers of states and seek to characterize a "working" market for different sets of buyers. Second, there actually is enormous variation in the nongroup market across and even within insurance plans in terms of the premiums proposed to be charged for a given nominal insurance policy (for example, a preferred provider organization with a \$1,000 deductible and a \$2,500 upper limit), in the underwriting procedures that would be followed, and in the functioning of the insurance (for example, the breadth of the network). Third, there is a substantial difference in premiums, underwriting, and behavior depending on whether the customer is a new customer or a renewal customer, because virtually all individual insurers renew policies without seeking information on changes in risk.<sup>37</sup> Fourth, there are differences in the benchmarks that define a "working" nongroup market. Group insurance is imperfect as well and may not ever be available to many now in the nongroup market. Finally, most studies report what insurers propose to charge or sell to a consumer, while only a small number of others report on what that consumer actually pays and receives.

Some characteristics of this market seem to be quite well established. Buyers search, so the average or typical premium quote may be a misleading indicator of performance. People who purchase probably pay less than the average offer price. Premiums for a given nominal policy vary with some indicators of buyer risk, especially age and location. But they do not vary perfectly with risk: Few higher risks pay their own expected costs (even if all insured persons do so on average).<sup>38</sup>

What about the ability to actually obtain coverage at that premium? Our earlier data on the relationship between obtaining nongroup insurance and risk shows that some higher risks do somehow obtain coverage.

People differ in their evaluation of this type of market depending on the benchmark they use (no coverage versus complete coverage, some pooling versus pure community rating) and the values they place on different levels of coverage. Those who think that coverage should entail some patient cost sharing have different views from those who think that cost sharing will only deter efficacious care. As-

sumptions about resources and funding are also important. With high premiums offset by sufficiently high and risk-adjusted premium subsidies, individual insurance coverage can be as comprehensive as one would like, but people differ on whether they think this kind of funding could or should be made available, and from what source. Lower-risk insurance buyers cannot easily be compelled to subsidize higher risks; either general government resources or higher premiums for lower risks would be required.

■ Would an infusion of large numbers of people into the nongroup market change how it works? New entrants could be either previously uninsured persons or those currently insured in the group market. Most obviously, a large subsidy makes individual health insurance a better buy. At least for those currently buying nongroup coverage, and possibly for some of the newly insured, the level of agent commission and other selling costs needed to get people to buy insurance should fall. In many ways, individual insurance is now a customized "boutique" product; subsidies for large numbers of buyers could well bring forth a much less costly mass-marketed product. The experience of GEICO and Allstate in mass-marketed auto collision insurance, an industry in which firms generally displayed loadings similar to those of individual health insurance, suggests that this change could cut the loading by up to one-third. However, this may not happen to the same degree in health insurance, since some auto insurance is mandatory.

■ Would the provision of tax credits for use in the nongroup market affect the group market? Thus far we have largely discussed and compared individual and small-group markets as they currently are, but it is likely that institution of a moderately generous and well-funded program of tax credits would transform both markets. What the transformation would be depends on the form of, eligibility for, and funding of the tax credit plan; a wide variety of options (and associated tradeoffs) are possible, too many to discuss here. We therefore limit our analysis to two commonly described transformations: (1) the average generosity of nongroup coverage, and (2) effects of nongroup tax credits on the extent and functioning of group insurance.

Generosity of coverage. Group insurance is subsidized with an open-ended tax exclusion, while nongroup insurance coverage usually is not. Research clearly shows that this subsidy increases both the average generosity of group coverage and the likelihood of using this method of providing coverage. Group coverage is also more generous than nongroup coverage because lower loading fees make it cheaper per dollar. Except for the self-employed, there is no tax subsidy for insurance purchases for those who do or might use the nongroup alternative. It is therefore no surprise that the generosity of coverage and the likelihood of taking coverage is smaller here.

The provision of a tax credit should change this pattern; it is intended to change it. So current nongroup policy designs will almost surely change dramatically if a significant credit program is introduced. How they will change depends on the

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form of the credit. All proposals should increase the number of persons obtaining nongroup insurance. Including both those who were formerly insured and those who were not, the average generosity of coverage will increase, but it is more likely to increase as well for the subpopulation buying coverage if the subsidy is openended rather than fixed-dollar.

Effects on group insurance. By reducing net nongroup insurance premiums relative to group premiums, tax credits may lead to some substitution of nongroup for group coverage. How much this happens depends on both the eligibility criteria for and form of the tax credit. There are two limiting cases in which the substitution would be small. One case is if eligibility for credits could be tightly restricted to those who would have been least likely to take up group coverage. The other case is when the same (net) credit is offered regardless of how insurance is obtained; in this neutral case, if group insurance is truly advantageous, people will still choose it. In contrast, substitution is greatest if a subsidy to individual insurance is offered that is larger than that for group insurance (in contrast to the situation today, where the bias is reversed), and it is easy for people to switch from group to individual coverage.

The first case (strictly limited eligibility) is difficult to achieve, since people would change their behavior to claim a large subsidy. Differential subsidies are often politically vulnerable as well because they are unfair. The second case (neutral credits) is more feasible in theory, but it is often much more costly to the budget than either the first option or the third (inefficient) case; sometimes budgetary compromise wins and economic welfare loses. Generally speaking, those who willingly drop coverage because of the new availability of more-generous individual tax credits would be expected to take up individual coverage (since that is the only way to benefit from the change) and should gain from doing so (since group insurance options are not made worse). However, the forced uniformity embodied in group insurance may mean that some individuals in an evaporating group may not switch to nongroup coverage. They may have actually preferred no insurance to any insurance, group or nongroup, and use the dissolution of a group as an excuse to stop taking insurance. There is considerable difference of opinion on how common these losers and escapees would be, compared with newly insured or better-insured gainers; it depends in part on how uniform members of a particular group are in terms of the value they place on insurance and what decision rules employers use in deciding whether or not to offer coverage. Both are among the murkjest of areas in health insurance economics.<sup>40</sup> Current theoretical and simulation work to shed light on these issues is under way but not yet conclusive. 41

To sum up: offering nonnegligible subsidies to nonnegligible uninsured popula-

tions could well transform the private individual insurance industry. They could cause individual insurance to be better, fairer, and cheaper and could relieve inexpert employers of the burden of trying to choose health insurance for their workers, while allowing those employers who are efficient proxy shoppers to survive. Alternatively, or at the same time, they could pull out an important supporting beam propping up the current group insurance structure and lead to a reconfiguration some fear, others loathe, and still others favor.

■ Is there any other policy intervention that could improve the nongroup market's functional capacity to absorb large numbers of new entrants? Our judgment is that the nongroup market is simply ill suited to absorb the sickest fraction of any population and that forcing market reforms on it for the purpose of enabling it to do so will probably make the overall outcome unacceptable to much larger numbers of people who are using it now than the new policy would help. For the uninsurable, high-risk pools or subsidized public coverage are better.

The major market failure in the nongroup market may instead be the inability of relatively healthy and frugal uninsured persons to signal their low risk accurately to insurers that are ever fearful of adverse selection. As a way of paying larger subsidies to very high risks, one might use a publicly subsidized and reinsured insurance option that would be actuarially priced at expected cost (plus administrative costs) for the uninsured as a whole. If the average spending estimates can be adjusted to be nearly correct, then low-price insurance might attract enough good risks to break even, and, if adverse selection turns out to be serious, the extra cost would be shared across the larger society through general revenue—financed reinsurance (and not add as an implicit excise tax on those now insured in the nongroup market).

Public dollars would go further and the risk of adverse selection would be reduced if institutions (like state employee or SCHIP purchasing and enrollment mechanisms) could be used or created so that grouplike loading would be applied to this product, rather than forcing the insured persons to pay current nongroup loads. However, doing so could be difficult. Just as early (but now rare) "first-dollar" Blue Cross and Blue Shield plans taught the commercial insurance industry that one could actually make money selling health insurance in a voluntary market and then disappeared, so the need for public reinsurance may wither away if adverse selection turns out not to be a serious problem in this case.

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#### **NOTES**

Only 12 percent of the uninsured with incomes below poverty and 36 percent with incomes at 100–200 percent of poverty are in families where someone is employed in a firm offering employer-sponsored insurance, yet these two income groups account for 60 percent of the uninsured. Authors' analysis of the 2000 Current Population Survey (CPS), available on request to Mark Pauly, pauly@wharton.upenn.edu.

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- 8. K. Pollitz, R. Sorian, and K. Thomas, How Accessible Is Individual Health Insurance for Consumers in Less-than-Perfect Health? June 2001, www.kff.org/content/2001/20010620a/report.pdf (22 August 2002).
- 9. This category and that of "uninsured afforders" are discussed in M.K. Bundorf and M.V. Pauly, "Is Health Insurance Affordable for the Uninsured?" Stanford School of Medicine Working Paper (Palo Alto, Calif.: Stanford University, November 2001).
- Regarding uninsured persons with family incomes more than twice the poverty level, authors' analysis of 2000 CPS data. Regarding uninsured households above 300 percent of poverty, M.V. Pauly and J.S. Hoff, Responsible Tax Credits for Health Insurance (Washington: AEI Press, 2002).
- 11. We used the definition of *chronic conditions* employed by Marie Reed and Ha Tu. See M.C. Reed and H.T. Tu, *Triple Jeopardy: Low Income, Chronically Ill, and Uninsured in America,* Issue Brief no. 49 (Washington: Center for Studying Health System Change, February 2002); and M.C. Reed and H.T. Tu, *Options for Expanding Health Insurance for People with Chronic Conditions,* Issue Brief no. 50 (Washington: HSC, February 2002). The Community Tracking Study (CTS) household survey asked respondents ages 18–64 whether they had been diagnosed with one of more than twenty chronic conditions and had seen a doctor in the past two years for the condition. The list of chronic conditions includes asthma, diabetes, arthritis, chronic obstructive pulmonary disease, heart disease, stroke, hypertension, high cholesterol, cancer (skin, lung, prostate, breast, colon), benign prostate enlargement, abnormal uterine bleeding, severe headaches, cataracts, HIV/AIDS, and depression.
- 12. We do this to reflect the concern that obtaining family coverage is difficult in the nongroup market if only one member of the family is high risk. Our results are qualitatively similar when we produce the same exhibit based on an individual concept of health status (results available on request).
- 13. M.V. Pauly and B.J. Herring, Pooling Health Insurance Risks (Washington: AEI Press, 1999).
- 14. Once again, the results are qualitatively identical using a person-level concept of health status.
- 15. Pauly and Herring, Pooling Health Insurance Risks.
- 16. Full regression results are available from the authors on request.
- 17. This equation is "reduced form" in the economist's sense: It is not a structural demand equation, for no exogenous measure of premium price and benefits exists at the present time. Jack Hadley and James Reschovsky are making progress on this front; see J. Hadley and J.D. Reschovsky, *Tax Credits and the Affordability of Individual Health Insurance*, Issue Brief no. 53 (Washington: HSC, July 2002). It is, however, useful as a "bottom line" kind of equation, for it reflects what is associated with net coverage outcomes, whatever the currently unobservable price and benefit package details are.
- 18. These results do not necessarily extend to all individuals. Future work will address this issue.
- 19. That is, insurance markets "work" for the 40 percent who are definitely not poor and for the 42 percent (70 percent of the remaining 60 percent) who are low income but not high risk.
- Moral hazard is present when the presence of coverage affects utilization. M.V. Pauly, "The Economics of Moral Hazard," American Economic Review (June 1968): 533–539. Typically, moral hazard–type multiples are estimated to be more like 1.5:1.

- 21. Unfortunately, the Medical Expenditure Panel Survey (MEPS) data available on the Web for easy cross-tabulations do not report spending by nongroup versus group coverage or by chronic condition.
- 22. Mark Pauly and Bradley Herring obtain a similar finding; the difference between actual average expenses of the uninsured and the insured, controlling for other observable factors, is much larger than the difference customarily attributed to moral hazard from insurance among the general population. M.V. Pauly and B.J. Herring, Cutting Taxes for Insuring: Options and Effects of Tax Credits for Health Insurance (Washington: AEI Press, 2002).
- 23. Pollitz et al., How Accessible Is Individual Health Insurance?
- 24. We avoided using words such as "preferred" or "standard" to reduce the risk that the insurer that supplied the data could be identified.
- 25. This carrier's actual rejection rate was 13 percent, since 1 percent were rejected for nonhealth reasons (for example, were living outside the plan's service area).
- 26. If 1 percent of the total nonelderly population is uninsurable, that would translate into roughly 6 percent of the uninsured population but a slightly higher proportion of the 33.7 million nongroup coverage candidates, since many uninsured persons turn down employer coverage and are not therefore strict nongroup coverage candidates by our definition.
- 27. As a referee pointed out, this is not the fullest possible distribution of applicants, since some may have been discouraged from filing applications by agents doubtful they would be accepted (so-called field underwriting) and by the fee that is required (typically the prospective first month's premium). Unfortunately, it is impossible to reliably estimate the number who are discouraged in this way. We assume that their numbers are quite small in relation to those who actually apply, but we could be wrong.
- 28. Pollitz et al., How Accessible Is Individual Health Insurance?
- 29. A.A. Gawande et al., "Does Dissatisfaction with Health Plans Stem from Having No Choices?" Health Affairs (Sep/Oct 1998): 184–194.
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- 31. Communicating for Agriculture, Comprehensive Health Insurance for High-Risk Individuals (Fergus Falls, Minn.: Communicating for Agriculture and the Self-Employed, 2000).
- 32. J.A. Marsteller et al., Variations in the Uninsured: State and County Level Analyses (Washington: Urban Institute, 1998).
- 33. A nice exposition of some of the trade-offs involved can be found in K. Swartz, "Markets for Individual Health Insurance: Can We Make Them Work with Incentives to Purchase Health Insurance?" *Inquiry* (Summer 2001): 133–145.
- 34. Either the generosity of coverage or the number of persons covered is reduced. S. Zuckerman and S. Rajan, "An Alternative Approach to Measuring the Effects of Insurance Market Reforms," *Inquiry* (Spring 1999): 44–56; F.A. Sloan and C.J. Conover, "Effects of State Reforms on Health Insurance Coverage of Adults," *Inquiry* (Fall 1998): 280–293; and Marsteller et al., *Variations in the Uninsured*.
- 35. Percy, "Community Rating and Small Group Reform."
- 36. Pollitz et al., How Accessible Is Individual Health Insurance?; K. Pollitz and L. Levitt, "Explaining the Findings of a Study about Medical Underwriting in the Individual Health Insurance Market," May 2002, www.kff. org/content/2001/20010620a/analysis.pdf (22 August 2002); National Association of Health Underwriters, "Addressing Availability of Coverage for the Chronically Ill Uninsured," Press Release, 12 March 2002, www.nahu.org/news/releases/03-12-2002.htm (22 August 2002); and NAHU, "Cost and Availability of Health Insurance for People with Chronic Health Conditions," 12 March 2002, www.nahu.org/NEWS/Kaiser-NAHU\_Analysis.DOC (22 August 2002).
- 37. Patel and Pauly, "Guaranteed Renewability and the Problem of Risk Variation."
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